Cosmic Origins Opportunities with the James Webb Space Telescope

COPAG Splinter

Agenda

- 3:00-3:10 pm: COPAG and COPAG activities Margaret Meixner
- 3:10-3:20 PM: Cosmic Origins and Astrophysics Technologies Mario Perez
- 3:20-3:50 PM: Applying for time in JWST's Cycle 1 Klaus Pontoppidan
- 3:50-4:20 PM JWST instrument capabilities Stephanie LaMassa
- 4:20-4:35 "The Cosmic Evolution Early Release Science (CEERS) Survey" Steve Finkelstein
- 4:35-4:50 "Star Formation at Low Metallcity: Studies with JWST" Margaret Meixner
- 4:50-5:05 "Establishing Extreme Dynamic Range with JWST: Decoding Smoke Signals in the Glare of a Wolf-Rayet Binary" Ryan Lau
- 5:05 5:20 "Star and Planet Formation with JWST: NIRCam and NIRISS GTO Science Programs" Michael Meyer
- 5:20-5:35 "The JWST NIRCam and MIRI GTO Debris Disk programs" Andras Gaspar
- 5:35-5:50 "Thermal Emission Spectroscopy of Beta Pictoris' Prototypical Debris Disk" Christine Chen
- 5:50-6:00 General Q&A

Cosmic Origins Program Analysis Group (COPAG) January 4, 2020

Margaret Meixner
(COPAG Executive Committee Chair)

COPAG Executive Committee Membership

Margaret Meixner (Chair)

Misty Bentz Steve Finkelstein

Alina Kiessling

Janice Lee

Stephan McCandliss

Tom Megeath

Alexandra Pope Claudia Scarlata

Jason Tumlinson

Sarah Tuttle

YOU? SOMEONE YOU KNOW?

STScI/Johns Hopkins University

Georgia State University

University of Texas

Jet Propulsion Laboratory, Caltech

Caltech/IPAC

Johns Hopkins University

University of Toledo

University of Massachussetts

University of Minnesota

STScI

University of Washington

Please nominate....

Mario Perez (Executive Secretary, Ex-Officio)

Eric Tollestrup (Ex-Officio)

Susan Neff (COR Program Office, Ex-Officio) **YOU?** (COR Program Office, Ex-Officio)

Erin Smith (COR Program Office, Ex-Officio)

NASA HQ

NASA HQ

NASA/GSFC - **Rotating Out..** Civil service job – **Please apply**

NASA/GSFC

Recruiting a new member. Deadline for nominations January 31 Interested? Email eric.v.tollestrup@nasa.gov.

NASA Cosmic Origins (COR) Program

- cor.gsfc.nasa.gov
- NASA COR mission portfolio includes:
 - Hubble
 - Spitzer
 - SOFIA
- JWST will be added in ~1.5 years under development
- COR has strong thematic interest in WFIRST in formulation
- COR themes cover a lot of astronomical research:
 - Extra-galactic e.g. evolution over cosmic time
 - Stars: formation, evolution and death
 - Milky Way science
 - Interstellar medium
 - Etc.

NASA Cosmic Origins (COR) Program

- cor.gsfc.nasa.gov
- Interested in being the new Cosmic Origins Program Chief Scientist?
- NASA/Goddard Civil Service job
- Advertisement in recent AAS Job Register:

https://jobregister.aas.org/ad/c8116df7

- Deadline January 21, 2020
- Contact: Jonathan Gardner, NASA/Goddard

What is Cosmic Origins Program Analysis Group (COPAG)?

- open, interdisciplinary forum
- provides a conduit for community input into NASA's COR Program
- conducts analyses in support of science objectives and their implications for planning of COR Program activities
- All interested community members can participate in COPAG.
- For more information: cor.gsfc.nasa.gov/copag

What is COPAG Executive Committee?

- Leads COPAG
- Captures and organizes community input
- Oversees COPAG analyses
- Identifies and prioritzes technology needsR for future missions
- Reports findings to Astrophysics Advisory Committee (APAC)
- Inform community of ongoing activities and opportunities in NASA COR Program

COPAG Executive Committee Membership

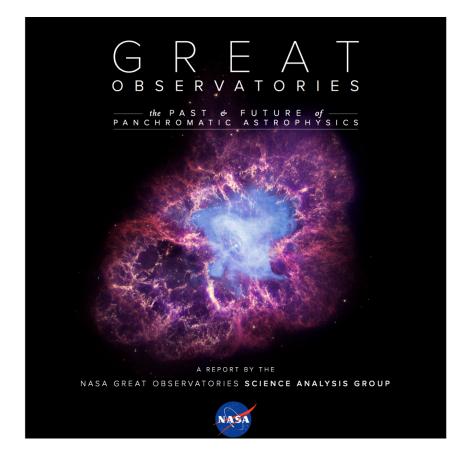
- Executive Committee Chair is a member of the Astrophysics Advisory Committee (APAC)
- Members' disciplines reflect the range of scientific disciplines and interests represented in COR
- Need a new member in the area of infrared (2 to 600 microns) instrumentation and technology
- Soliciting nominations and self nominations for EC via email to eric.v.tollestrup@nasa.gov
- Cover letter and one page CV in one pdf
- Cover letter describes relevant interests, expertise and qualifications
- Deadline January 31, 2020

COPAG Activities

- Two science interest groups (SIGs)
 - UVSIG Jason Tumlinson recruiting a co-chair
 - IRSIG Naseem Rangwala & Eric Murphy co-chairs
- One technology interest group (TIG) Sarah Tuttle, recruiting members
- Two science analysis groups (SAGs)
 - SAG10 Great Observatories Report completed Lee Armus & Tom Megeath
 - SAG11 Cosmic Dawn starting Claudia Scarlata & Steven Finkelstein recruiting members

Cosmic Dawn Science Analysis Group #11

- Reionization and galaxy evolution in the very early universe
- What questions will remain after the JWST mission
- Assess the potential for future NASA large missions or proposed probe-class missions to answer these questions
- Explore what investigations can be done with current telescopes and archives
- Identify the need for coordinated multi-observatory programs and/or simulation efforts towards these goals.
- Joint with PhysPAG
- Report by end of 2020
- Splinter Tuesday, Jan. 7, 2-3 pm, Room 323C Convention center
- Interested in joining?
- Fill out interest form by 31 Jan 2020, all career stages welcomed!
- https://forms.gle/PmJfW4ULtYYwGRUD7



Great Observatories Splinter @ AAS: Sunday, Jan. 5, 9:30-11:30 AM Room 323A

Convention Center – Lee Armus

SAG10 report is posted on website: https://cor.gsfc.nasa.gov/sags/sag10.php

What Studies would you like to see?

- You can lead or suggest one
- You don't have to be an EC member
- Talk to us and we will support your efforts

COPAG @ the AAS

Sat. Jan. 4

10 am - 12 noon UVSIG and TIG splinter, Hilton Hawian Village, Jason Tumlinson & Sarah Tuttle

1-3 pm NASA Joint PAG session, Coral Ballroom 1, Hilton Hawaiian Village,

3-6 pm COPAG splinter: Cosmic Origins Opportunities with JWST, Coral Ballroom 1, Hilton Hawaiian Village, - Margaret Meixner

Sunday Jan. 5

9:30–11:30 am SAG 10, Great Observatories: the Past & Future of Panchromatic Astrophysics, Room 323 A, Convention Center, Lee Armus & Tom Megeath

Tuesday, Jan. 7

9:30–11:30 am IRSIG splinter: The role of Infratred Astronomy in NASA's Stratefic Vision to 2030, Room 304 AB Convention Center, Naseem Rangwala, Eric Murphy

2–3 pm Cosmic Dawn SAG11, Room 323 C Convention Center, Steven Finkelstein & Claudia Scarlata

Full details of all COPAG relevant events including dial-in information can be found online at: https://cor.gsfc.nasa.gov/copag/AAS Jan2020/COPAG Activities Jan2020AAS.php